



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 4-7

Issued: 30 Jan 2022 / 0900L (1400Z)

Valid: 31 Jan 2022 / 1407 – 1746L (1907 – 2246Z)



Forecast Discussion: Dry and chilly conditions will continue today as a surface high center slides east from the Gulf and settles directly over the Florida peninsula. Little change is expected into Monday as the high center moves east, with light easterly flow allowing a few more cumulus clouds off of the Atlantic. There will only be a small concern for Cumulus Clouds during the Monday afternoon launch window.

The next system starts to take shape over the Central US on Tuesday, with a weaker secondary system over the western Gulf of Mexico. The tightening pressure gradient between these features and the departing high to the east of the state will bring a modest increase in onshore flow. More moisture at all levels will bring an increase in clouds, with a slightly increased threat for Cumulus Clouds during the backup launch window Tuesday afternoon.

Launch Day	Probability of Violating Weather Constraints							
	10%	Primary Concerns: Cumulus Cloud Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	63°F / 52%	Cumulus	Few	3,000	5,000	Booster Recovery Weather:	Low
	Liftoff Winds (200’):	050° 5 - 10 mph	Cirrus	Few	25,000	30,000	Solar Activity:	Low
24-Hour Delay	Probability of Violating Weather Constraints							
	20%	Primary Concerns: Cumulus Cloud Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	67°F / 56%	Cumulus	Scattered	3,000	6,000	Booster Recovery Weather:	Low
	Liftoff Winds (200’):	080° 10 - 15 mph	Cirrus	Scattered	20,000	30,000	Solar Activity:	Low
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.								
Next Forecast Will Be Issued		As Needed						